Vermont All-Payer ACO Model
Medicare Total Cost of Care Annual Report
Performance Year 3
(January – December 2020)

Submitted April 29, 2022

Green Mountain Care Board

Executive Summary

The Annual Medicare Total Cost of Care (TCOC) Report, as required by the Vermont All-Payer Accountable Care Organization Model ("All-Payer ACO Model" or "APM") Agreement, illustrates Vermont's progress toward its Medicare TCOC per Beneficiary Growth Target. Under the Agreement, Vermont's Medicare TCOC is measured against the projected growth of Medicare fee-for-service (FFS) expenditures nationally. These projections are released annually, with separate targets for beneficiaries eligible for Medicare due to End Stage Renal Disease (ESRD) and those eligible due to age and/or disability (non-ESRD). The Agreement's target is set to be between from -0.2 to +0.1 percentage points of the national projections. This report summarizes the Medicare TCOC through Performance Year 3 (calendar year 2020).

The results presented here for 2020 will not accurately assess "performance" as outlined in the APM Agreement. The effects of the global pandemic and associated Public Health Emergency (PHE) necessarily and drastically changed care patterns. The PHE redefined short-term health system priorities to meet immediate acute care needs and stabilize the health care system. These necessary changes are likely to have impacted preventive care and health promotion activities. The full effects of the PHE are still developing and may distort trends for many years to come.

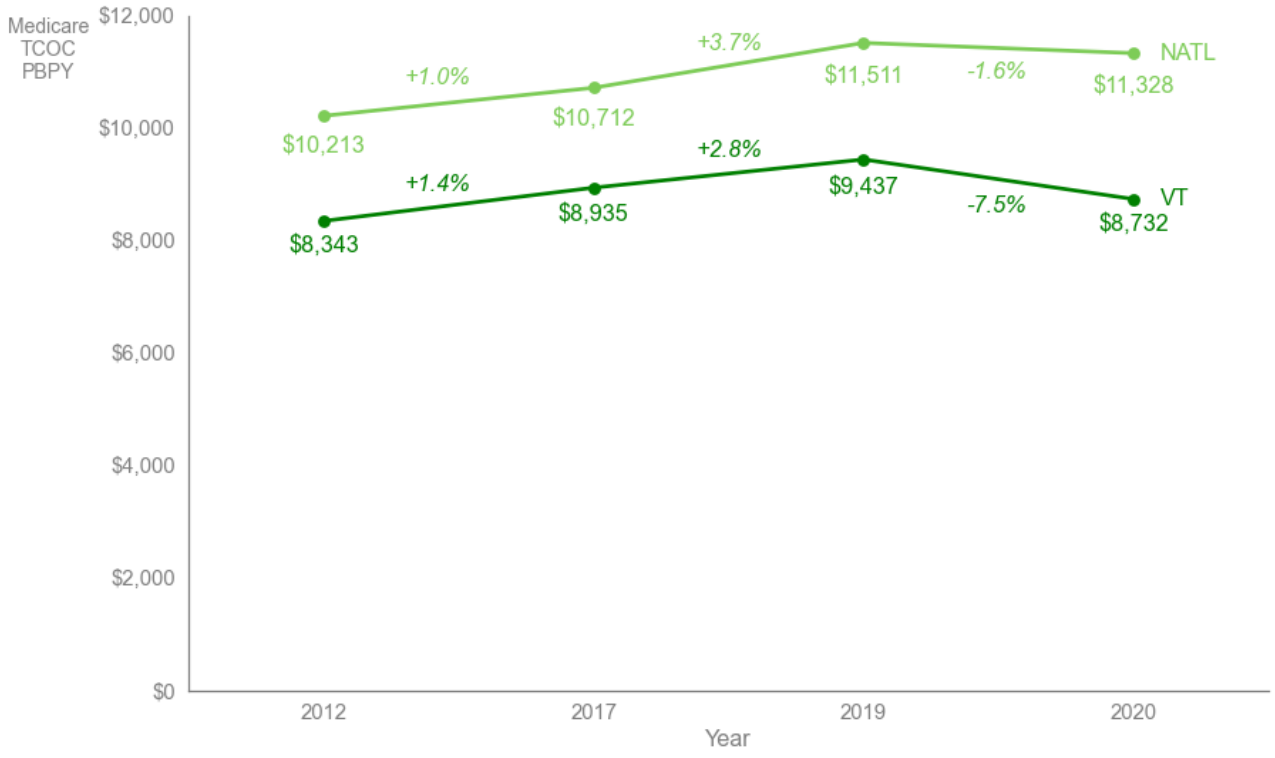
Vermont is currently on track to meet its Medicare TCOC per Beneficiary Growth targets for both populations. As summarized in Table 1, the Vermont Medicare TCOC per beneficiary per year (PBPY) growth was below the target for every year of the Agreement to date. The performance to date indicates the non-ESRD performance is 4.5 percentage points below the target with ESRD 10.4 points below its target.

Table 1: Vermont Medicare TCOC Per Beneficiary Growth to Date by Beneficiary Type

		Performance		National Projections		Vermont Performance Above / (Below) Target
		Annual Growth	Compounding Growth	Annual Growth	Compounding Growth Target	
Non-ESRD	PY1 (2018)	0.5%	0.5%	3.7%	3.5%	(3.0)
	PY2 (2019)	3.3%	1.9%	4.0%	3.7%	(1.8)
	PY3 (2020)	-5.9%	**-0.8%**	4.2%	**3.8%**	**(4.5)**
ESRD	PY1 (2018)	-18.4%	-18.4%	3.7%	3.5%	(21.9)
	PY2 (2019)	2.4%	-8.8%	3.3%	3.3%	(12.1)
	PY3 (2020)	-4.5%	**-7.2%**	3.1%	**3.1%**	**(10.4)**

Vermont's Medicare expenditures per beneficiary have consistently been lower than those obseved nationally (Figure 1). However, prior to the execution of the Agreement, Vermont's per beneficiary growth exceeded that observed nationally. In the five years prior to the base year of the Agreement (2012 to 2017), Vermont's compounding annual growth rate (CAGR) was nearly half a percentage point higher than that observed nationally. From 2017 to 2019, Vermont's CAGR was nearly a percentage point below national. As previously stated, results from 2020 are associated with the global pandemic. However, it is notable that the decline in Vermont's expenditures was much more significant than that nationally (-7.5% in VT versus -1.6% nationally). This is likely due to a combination the swift and robust measures Vermont took to contain the spread of COVID-19, as well as the effects of a cyber-attack that affected Vermont's largest hospital system.

Figure 1: Medicare TCOC PBPY, Vermont vs United States

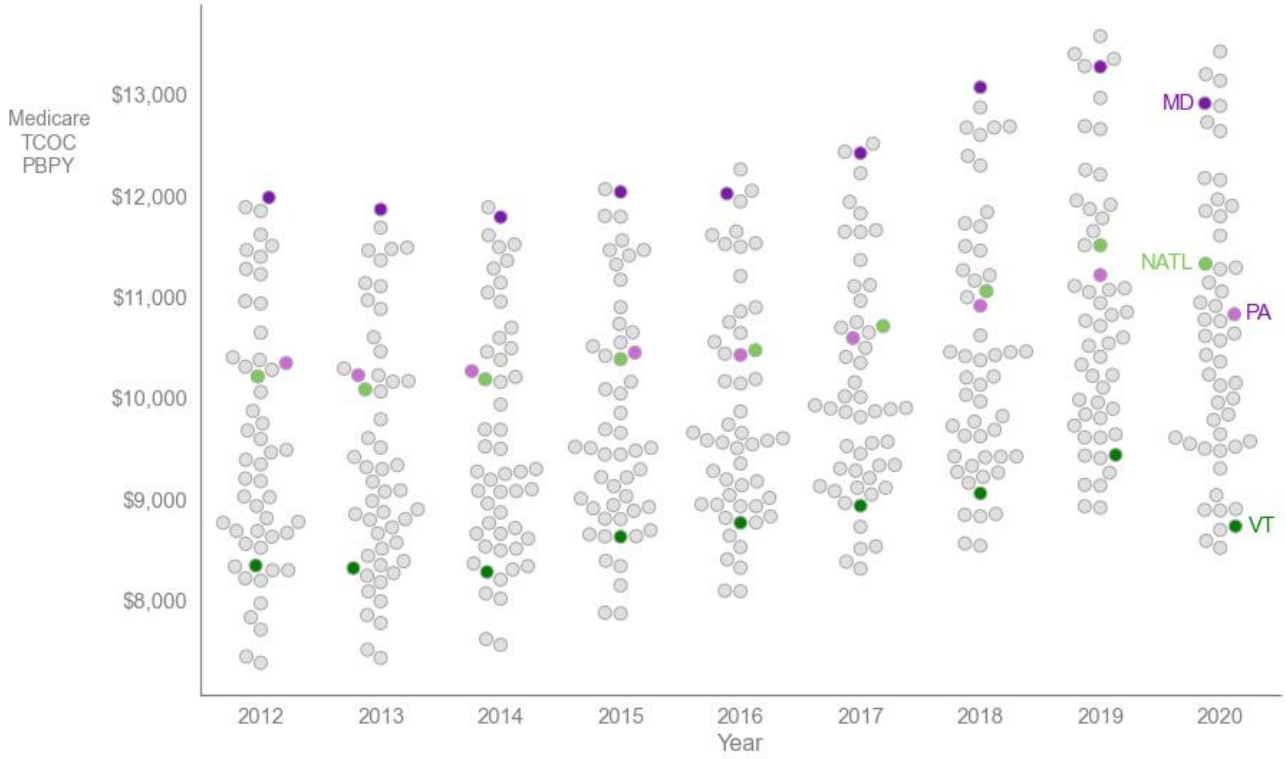


Data source: CMS

Medicare's TCOC PBPY varies significantly by state. As summarized in Figure 2, Vermont consistently demonstrates one of the lowest per capita TCOCs in the nation. Vermont's expenditures have not only been

considerably lower than national expenditures, but also notably lower than the other states currently participating in All-Payer Models with CMS.

Figure 2: Medicare TCOC PBPY by State



Data source: CMS

These results are consistent with findings from the Vermont All-Payer Model's first evaluation report.[1] As Vermont looks to extend its efforts to transform the way care is delivered, it is important to note that the contributions of well-established, proven investments. These include the Blueprint for Health's advanced primary care practices, Community Health Teams, and Hub and Spoke program, as well as Vermont's Support and Services at Home program. These initiatives are a critical foundation from which the APM builds, which have already demonstrated substantial returns on their investments.

[1] https://innovation.cms.gov/data-and-reports/2021/vtapm-1st-eval-full-report.

1. Introduction

The Vermont All-Payer Accountable Care Organization Model ("All-Payer ACO Model" or "APM") Agreement was signed on October 26, 2016, by Vermont's Governor, Secretary of Human Services, Chair of the Green Mountain Care Board (GMCB), and the Centers for Medicare & Medicaid Services (CMS). The All-Payer ACO Model aims to reduce health care cost growth by moving away from fee-for-service reimbursement to risk-based arrangements for Accountable Care Organizations (ACOs); these arrangements are tied to quality and health outcomes. This report provides a summary of progress to date toward achieving the Medicare Total Cost of Care (TCOC) per beneficiary growth targets, as described in Section 9 (Statewide Financial Targets) of the APM Agreement.

The data for Medicare reported differ from that reported from Medicare in the All-Payer TCOC reports. The differences are due to different data sources, populations, and methodologies.

- The data here are sourced from CMS's Integrated Data Repository (IDR), whereas the All-Payer data originate from the Chronic Conditions Warehouse (CCW). The CCW provides quarterly extracts, which are most appropriate for integrating into the state's All-Payer Claims Database. However, the data in the IDR provides more precise financial data.

- The data available through the CCW are limited to Vermont residents. However, beneficiaries may be attributed to a Vermont ACO without being a resident in the state. The data in this report include all beneficiaries attributed to the ACO, regardless of residency.

- Results here are *paid amounts* whereas the data in the All-Payer TCOC reporting are *allowed amounts*. Allowed amounts include members' expected share of reimbursements. It's important to include the members' share in the All-Payer results to help make comparisons as apples-to-apples as possible.

- COVID episodes are included in the membership and expenditures results for this report, whereas they have been excluded for the ACO settlement in 2020.

The Agreement limits the Medicare TCOC per beneficiary growth target to beneficiaries aligned to Scale Target ACO initiatives in the first three PYs.[2] During this time, the only Scale Target ACO initiative operating was OneCare Vermont. The results here will also differ from the financial settlement results between OneCare Vermont and CMS. This is because this report includes expenditures for any months an ACO-aligned beneficiary retains their eligibility. In contrast, these beneficiaries are excluded from the calculations at the time of settlement with the ACO.

[2] If Vermont had achieved its ACO Scale Target for Medicare in PY3, 65%, the measurement would have been based on Vermont Medicare beneficiaries. PY 4 and 5 will be based on all Vermont Medicare beneficiaries, regardless of ACO Scale Target performance.

2. Medicare TCOC per Beneficiary Growth Target

Unlike the All-Payer TCOC per Beneficiary Growth Target, the targets for Medicare change annually, based on the projections for fee-for-service FFS expenditures nationally. These projections are released annually in the Medicare Advantage United States Per Capita Cost (MA USPCC) Final Announcement. Since projections are refined each year, estimates for the same year change between announcements.

Vermont's performance will measured as an aggregated CAGR for Performance Years 1 through the end of the Agreement. The Agreement is structures such that the Medicare TCOC is limited to ACO-aligned beneficiaries in PY 1 and 2. In PY 3 and 4, the Medicare TCOC will be based on all Medicare beneficiaries. The population used for PY 3 (2020) was based on Vermont performance on the Medicare ACO Scale Target performance. Since the state failed to achieve the target of 65% alignment, PY 3 uses an additional year of Medicare beneficiaries aligned to the ACO.

As outlined in Section 8.b.ii.1.b, the 2018 MA USPCC announcement resulted in a value that allowed the state to use a growth target of 3.7% in the first PY (2018). Therefore, the target shall be calculated as specified in Section 9.b.iv of the Agreement:

$$\left(1.037 * \left(\frac{MA\ USPCC\ FFS_{2019}}{MA\ USPCC\ FFS_{2018}}\right)_{Announced\ in\ 2018} * \left(\frac{MA\ USPCC\ FFS_{2020}}{MA\ USPCC\ FFS_{2019}}\right)_{Announced\ in\ 2019} * \left(\frac{MA\ USPCC\ FFS_{2021}}{MA\ USPCC\ FFS_{2020}}\right)_{Announced\ in\ 2020} * \left(\frac{MA\ USPCC\ FFS_{2022}}{MA\ USPCC\ FFS_{2021}}\right)_{Announced\ in\ 2021}\right)^{\frac{1}{5}} - 1$$

Vermont's target is to maintain growth within a range of 0.2 below to 0.1 above the compounding target to date. Table 2 summarizes the announcements to date and shows how the targets to date were derived.

Table 2: MA USPCC FFS Estimates and Vermont APM Targets, 2018 to 2020

	PY	Baseline PBPM (PY-1)	PY PBPM	Annual Growth Rate	CAGR to Date	Target to Date
Non-ESRD	2018[3]	n/a	n/a	3.7%	3.7%	3.5% - 3.8%
	2019	$856.41	$891.07	4.0%	3.9%	3.7% - 4.0%
	2020	$903.21	$940.81	4.2%	4.0%	**3.8% - 4.1%**
ESRD	2018[3]	n/a	n/a	3.7%	3.7%	3.5% - 3.8%
	2019	$7,586.28	$7,833.28	3.3%	3.5%	3.3% - 3.6%
	2020	$7,910.87	$8,110.21	3.1%	3.3%	**3.1% - 3.4%**

[3] The Agreement allowed Vermont to use a target of 3.7% per Section 8.b.ii.1.b of the Agreement.

3. Summary of Results

Vermont's results to date are substantially lower than its targets. As previously discussed, the significant decrease in 2020 cannot be attribute to performance. However, the state was on track to achieve its targets through the first two years of the Agreement with the non-ESRD results nearly 2 percentage points below the target and ESRD 12 percentage points below (Table 3). Vermont's expenditures declined relatively more than was observed nationally. This may mean that Vermont will also experience higher relative growth in subsequent years, as the effects of postponing or missing preventive care may result in more acute care needs in the state's recovery.

Table 3: Medicare TCOC Results to Date

		Beneficiaries Aligned to an Accountable Care Organization				Target (Difference)
		Baseline PBPY	PY PBPY	Annual Growth	CAGR	
Non-ESRD	**PY1 (2018)**	$9,117	$9,163	0.5%	0.5%	3.5% (-3.0)
	PY2 (2019)	$9,367	$9,673	3.3%	1.9%	3.7% (-1.8)
	PY3 (2020)	$9,597	$9,033	-5.9%	-0.8%	**3.8% (-4.5)**
ESRD	**PY1 (2018)**	$74,866	$61,080	-18.4%	-18.4%	3.5% (-21.9)
	PY2 (2019)	$71,465	$73,161	2.4%	-8.6%	3.3% (-12.1)
	PY3 (2020)	$72,407	$69,179	-4.5%	-7.2%	**3.1% (-10.4)**

The calculation for the PBPY expenditures includes a few components. Traditional FFS expenditures are included for any month that an aligned beneficiary maintained their eligibility for alignment to the APM. The FFS-equivalent values are included for any claims that were paid prospectively through the All-Inclusive Population Based Payments (AIPBP) made to OneCare Vermont. Uncompensated care payments (UCC) made as part of Medicare's Disproportionate Share Hospital adjustment are deducted from the total.

In accordance with the Agreement, any shared savings payments must be included in the TCOC calculation. Shared savings are returned to providers participating in the ACO program. Since these dollars are used for all patients, regardless of whether the patient is aligned to the ACO or not, the payments are calculated as a per member basis for all Vermont Medicare beneficiaries. The per member values used are derived as part of the All-Payer TCOC and those values are used here for consistency.

One the claims-based expenditures and shared savings payments are added together, the values are divided by the number of member months associated with eligible membership and multiplied by 12 to arrive at the PBPY estimate.

$$\text{Medicare TCOC PBPY} = \frac{\text{FFS expenditures} + \text{AIPBP FFS equivalents - UCC}}{\text{Eligible months of ACO alignment}} * 12 + \text{Shared Savings PBPY}$$

The baseline expenditures for each performance year are calculated based on a hypothetical comparison population. For example, in 2018 (PY 1), the baseline experience is computed based on the beneficiaries who *would have aligned to the ACO in 2017* based on the providers participating in the model in 2018. It is critical to have a representative comparison group for a prospectively aligned Medicare cohort due to the high costs associated with end-of-life care. The components of the baseline and PY PBPYs are summarized in table 4. Shared Savings estimates are summarized in Table 5.

Table 4: Components of Medicare TCOC PBPY

			FFS Claims	AIPBP FFS Equivalents	UCC	Member Months	Claims-Based PBPY	Shared Savings PBPY	Total PBPY
Non-ESRD	PY1 (2018)	Baseline	$299,593,878	$0	$3,545,253	392,360	$9,054.40	$62.51	**$9,117**
		PY	$188,149,339	$143,928,984	$3,570,477	435,407	$9,053.81	$108.92	**$9,163**
	PY2 (2019)	Baseline	$318,560,158	$130,274,501	$4,884,365	575,449	$9,257.82	$108.92	**$9,367**
		PY	$304,709,801	$210,514,267	$5,705,515	638,103	$9,581.87	$91.59	**$9,673**
	PY3 (2020)	Baseline	$255,317,300	$177,355,536	$4,948,735	539,994	$9,505.09	$91.59	**$9,597**
		PY	$255,144,840	$178,900,741	$3,918,218	583,440	$8,901.57[4]	$131.62	**$9,033**
ESRD	PY1 (2018)	Baseline	$9,510,232	$0	$116,199	1,507	$74,803.18	$62.51	**$74,866**
		PY	$3,589,601	$4,953,738	$78,475	1,666	$60,971.40	$108.92	**$61,080**
	PY2 (2019)	Baseline	$8,748,128	$4,261,427	$153,629	2,162	$71,355.74	$108.92	**$71,465**
		PY	$7,170,205	$7,202,116	$148,186	2,336	$73,069.19	$91.59	**$73,161**
	PY3 (2020)	Baseline	$6,923,204	$6,463,253	$140,609	2,198	$72,315.82	$91.59	**$72,407**
		PY	$5,193,811	$7,563,738	$90,761	2,216	$69,047.25[4]	$131.62	**$69,179**

Table 5: Shared Savings PBPY

	Shared Savings	Vermont All-Payer TCOC Medicare Member Months	PBPY
2017	$7,500,000	1,439,691	$62.51
2018	$13,345,337	1,470,356	$108.92
2019	$11,285,496	1,478,673	$91.59
2020	$16,313,471	1,487,290	$131.62

[4] Part of the flexibilities from the federal government related to the public health emergency was to suspend sequestration payments. The amount sequestered prior to the emergency were added to the claims based PBPY, totaling $2,666,907 for non-ESRD and $$83,937 for ESRD in 2020.

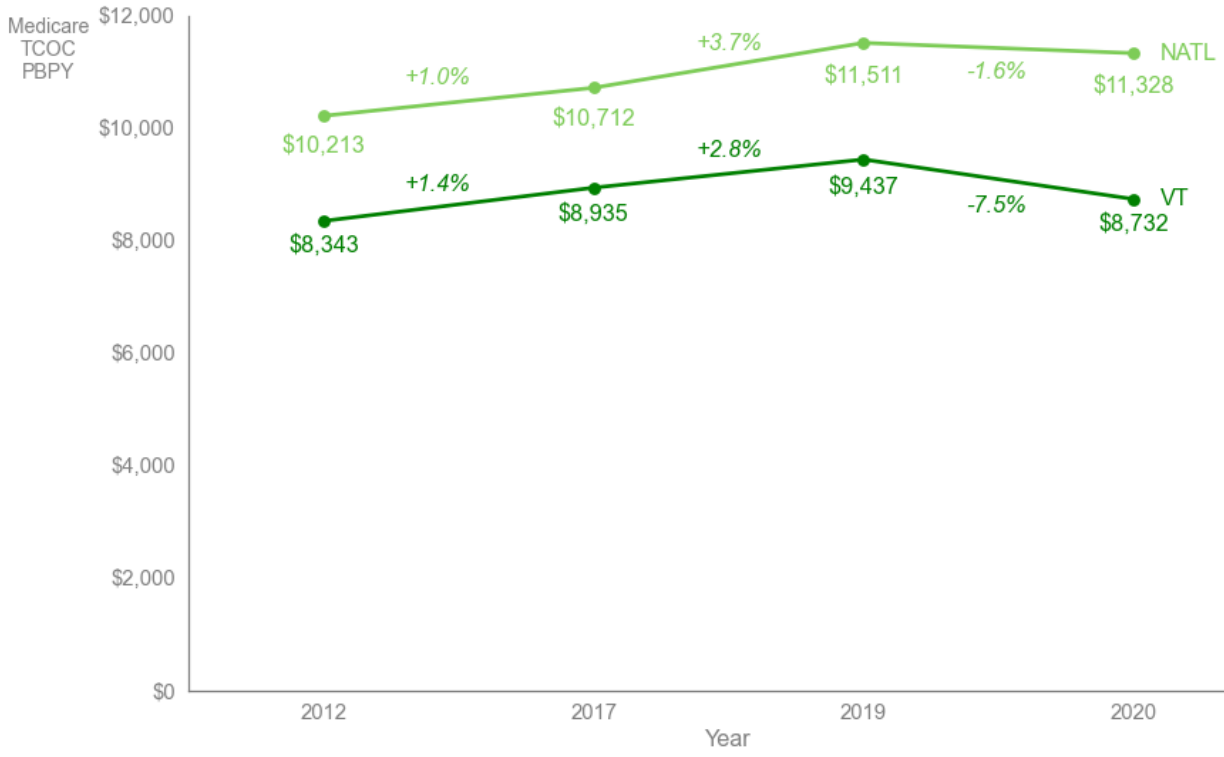
4. Comparative Performance

The following sections are provided to put Vermont's performance to date in context, both across the United States and within Vermont.

4.1. National and Other States

Vermont's Medicare expenditures per beneficiary have consistently been lower than those obseved nationally (Figure 1). However, prior to the execution of the Agreement, Vermont's per beneficiary growth exceeded that observed nationally. In the five years prior to the base year of the Agreement (2012 to 2017), Vermont's compounding annual growth rate (CAGR) was nearly half a percentage point higher than that observed nationally. From 2017 to 2019, Vermont's CAGR was nearly a percentage point below national. As previously stated, results from 2020 are associated with the global pandemic. However, it is notable that the decline in Vermont's expenditures was much more significant than that nationally (-7.5% in VT versus -1.6% nationally). This is likely due to a combination the swift and robust measures Vermont took to contain the spread of COVID-19, as well as the effects of a cyber-attack that affected Vermont's largest hospital system.

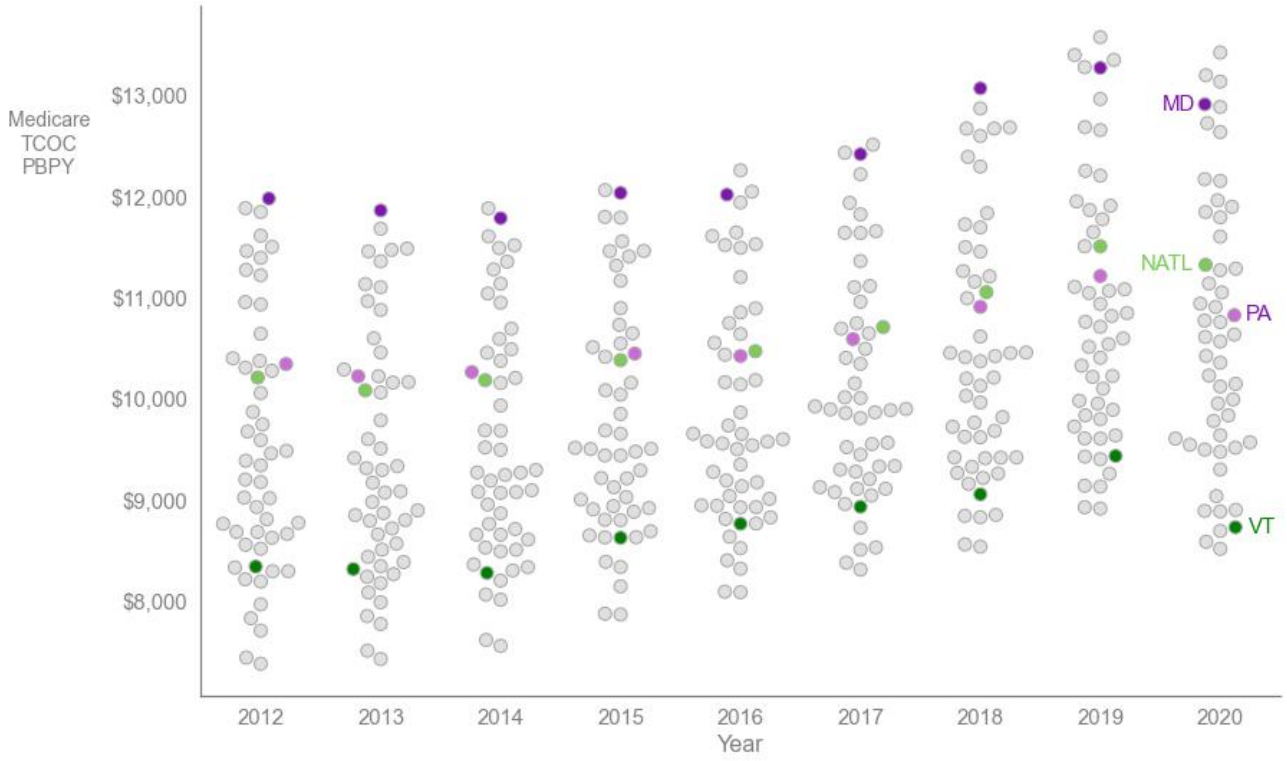
Figure 3: Medicare TCOC PBPY, Vermont vs United States



Data source: CMS

Medicare's TCOC PBPY varies significantly by state. As summarized in Figure 2, Vermont consistently demonstrates one of the lowest per capita TCOCs in the nation. Vermont's expenditures have not only been considerably lower than national expenditures, but also notably lower than the other states currently participating in All-Payer Models with CMS.

Figure 3: Medicare TCOC PBPY by State



Data source: CMS

These results are consistent with findings from the Vermont All-Payer Model's first evaluation report.[5] As Vermont looks to extend its efforts to transform the way care is delivered, it is important to note that the contributions of well-established, proven investments. These include the Blueprint for Health's advanced primary care practices, Community Health Teams, and Hub and Spoke program, as well as Vermont's Support and Services at Home program. These initiatives are a critical foundation from which the APM builds, which have already demonstrated substantial returns on their investments.

[5] https://innovation.cms.gov/data-and-reports/2021/vtapm-1st-eval-full-report

4.2. Vermont subpopulations

Vermont's Medicare beneficiaries must meet certain criteria to be eligible for alignment in CMS's ACO model:

- have both Part A and Part B coverage
- are not covered by Medicare Advantage
- have Medicare as their primary health insurance coverage
- be a resident of the United States

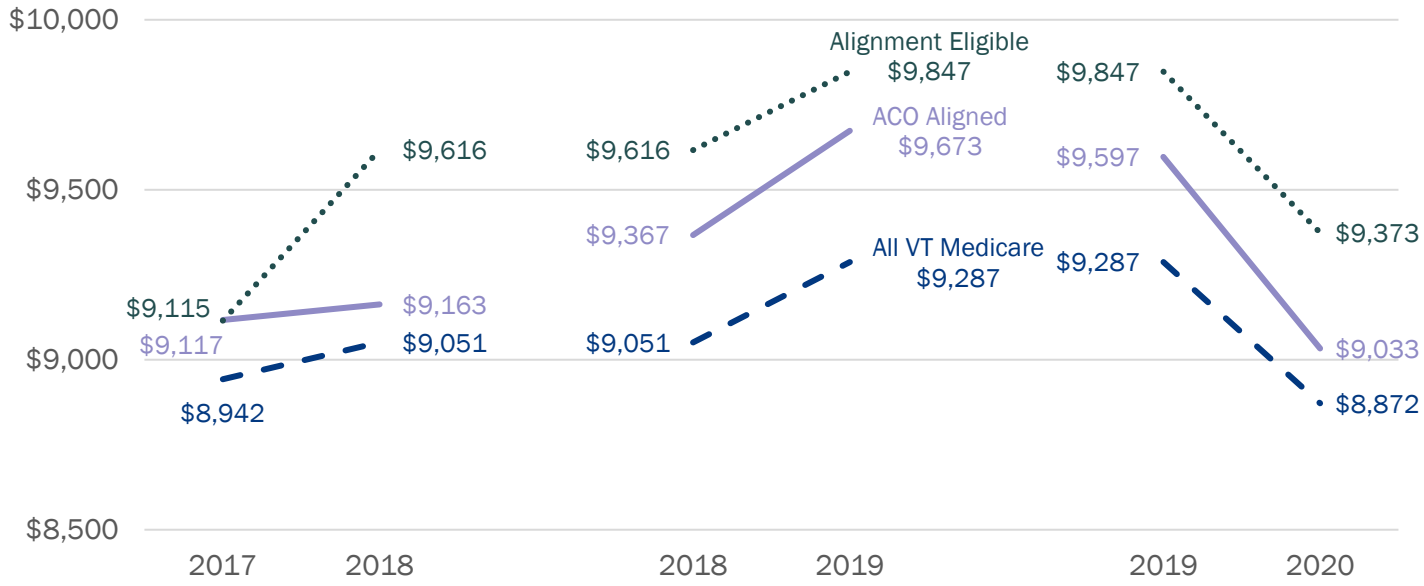
Beneficiaries eligible for alignment may or may not incur claims associated with primary care. They also may also have primary care relationships with providers outside of Vermont and/or those not participating in an ACO. Those who are eligible for alignment are then aligned to an ACO if the ACO's network of providers are responsible for most of their primary care.

This groups Vermont's Medicare beneficiaries into three major categories:

1) All Vermont beneficiaries (alignment-eligible beneficiaries and those not eligible)
2) Alignment-eligible beneficiaries
3) Beneficiaries aligned to the ACO

The PBPY expenditures differ among these groups (Table 6). Beneficiaries who meet eligibility requirements have a higher PBPY expenditure than the full Vermont population. Beneficiaries ineligible for alignment may not have full Medicare coverage or Medicare may be their secondary payer, which means their PBPY expenditures are lower. The entire group of beneficiaries eligible for alignment has the highest PBPY with the group aligned to the ACO in the middle.

Table 6: Vermont Non-ESRD Medicare TCOC PBPY by Vermont Subpopulation

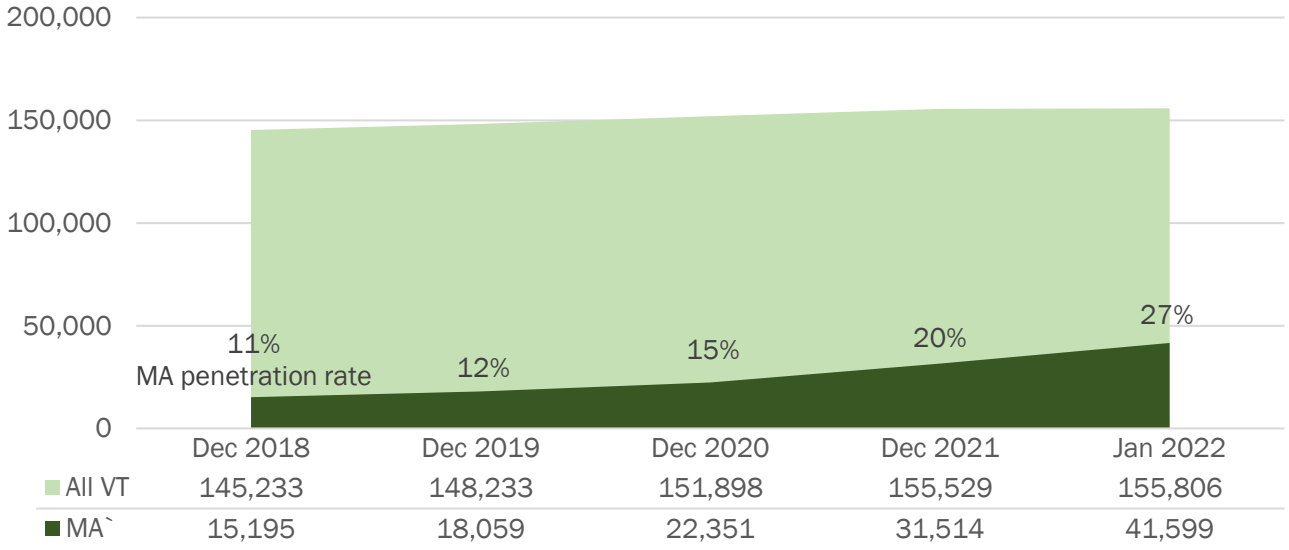


Alignment Eligible	+ 5.5%	+ 2.4%	- 4.8%
ACO Aligned	+ 0.5%	+ 3.3%	- 4.5%
All VT Medicare	+ 1.2%	+ 2.3%	- 5.9%

The group of beneficiaries aligned to the ACO exhibited the most significant decline in the TCOC PBPY in 2020. Part of the relative difference is likely due to the cyber-attack, as many beneficiaries attributing patients to the model are affiliated with that hospital system.

4.3. Medicare Advantage

Until recently, Vermont's Medicare Advantage (MA) penetration rate had been under 10% of beneficiaries. Since 2018 enrollment has nearly tripled, and one quarter of Vermont beneficiaries are now enrolled in MA plans.



The population of beneficiaries newly enrolling in MA plans show lower PBPY expenditures. If this trend continues, the PBPY of the remaining traditional Medicare population may increase as beneficiaries with lower PBPY expenditures opt to MA plans.

The increased penetration of MA members affects the APM, as beneficiaries who elect MA plans are not eligible for alignment. It also adds an additional challenge to developing accurate financial benchmarks, as the reference population may include lower cost beneficiaries that are no longer eligible for alignment during the PY. For example, estimates provided by CMS suggest that removing the newly enrolled MA beneficiaries from the current PY population increased the PBPY expenditures by $147 in 2021. When rolled up to the full aligned population, it means the historical TCOC may be inflated by $7.5 million dollars.[6]

Navigating these population changes will be an important challenge to overcome in order to provide accurate, prospective financial targets.

[6] Comparing the 50,611 beneficiaries eligible for settlement using 2021 claims at $9,366 vs $9,219 PBPY.